Washington State

Web Presentation Guidelines for Digital Government

Version 3.0

Purpose

State agencies are working cooperatively to realize the vision of digital government in Washington state. Agencies are taking the "enterprise" approach to provide webbased content and services.

One Washington enterprise objective is to provide "one face" to online government by providing a common look and feel for digital government web-based services so that the general public, businesses, and employees experience accessible, convenient, and easy-to-use government interactions and transactions. The web presentation guidelines are a tool to help achieve the enterprise approach to digital government. For more information regarding digital government, visit the Digital Government web site.

The purpose of these guidelines is to provide direction for the delivery of interagency and public web presentations. These guidelines will be reviewed on a continuing basis by the Department of Information Services (DIS) in coordination with the Customer Advisory Board (CAB) to assess impacts of changes in technology and capabilities.

Objectives

1. Provide Best Possible Experience

Digital government strives to reach the broadest possible audience. In order to achieve broadly accessible, convenient, and useful digital government services, it is necessary for developers to follow a set of standard web design guidelines. The guidelines balance access needs, functionality requirements, and industry technical requirements. The following guidelines are intended to help you design your digital government services for universal web access. Included is information for Universal Web Access Design, Performance, Hyperlinks, Meta Tags, Browsers and HTML, Testing, Privacy, and Intended Use of the Web Site.

2. Minimize Hardware and Software Requirements for Users

Minimize the "footprint" on the user machine by limiting download requirements for government web-based services. The following are guidelines to assist this development:

- Minimize client-side code. The guideline is consistent with the <u>Internet direction</u> for portable logic using server-side logic as adopted by the Information Services Board (ISB) on 12/10/1999.
- *Minimize user workstation requirements.* Minimize the requirements placed on the user workstation to support plug-ins.
- Provide clear requirements. When downloaded plug-ins are required, make them available for download and alert the user to any workstation requirements.
- No client fees. Specify downloaded tools that are freely available to consumers.

3. Provide Common Look and Feel

It is a fundamental objective of digital government to provide a common look and feel to information offered on its web sites. "Common look and feel" means a unified direction and scope achieved through the use of similar design and navigation elements. Templates, style guides and supporting resources are available to assist agencies with this effort.

"...form and function matter. The individual agency web sites and transactions should share a common look and feel, so a visitor who has learned how to navigate one agency's web site knows how to navigate them all." - Gov. Gary Locke (e-Commerce Update Winter Edition 2001)

Usability studies show that unstructured web sites detract from the information provided and users get frustrated and go elsewhere. A financial benefit exists to those agencies that follow the guidelines and use the templates. "Reinventing the wheel" is expensive. Each agency works within its own unique environment and should review its own standards and needs when developing a web site.

Guidelines

The guidelines are organized into four categories; Planning, Detailed Design, Development, and Maintenance.

Planning

Design for Universal Web Access

Universal web access is fundamental to provide individuals who use a variety of devices to access digital government services. These can include assistive technology devices for individuals with disabilities, web-enabled telephones, personal digital assistants (PDAs), character-based browsers, and other types of electronic devices.

Design for Accessibility

The state of Washington is committed to providing employees and the public, including individuals with disabilities, access to the web-based information and services. Agencies are encouraged to use the Checklist and Guidelines for Web Content Accessibility developed by the Web Accessibility Initiative to evaluate the usability of agency web pages. Many of these checklist items have been incorporated into section 508 of the Rehabilitation Act, which establishes accessibility standards for the federal sector.

Web Accessibility Resources:

- WAI Checklist for Web Content Accessibility
- The Microsoft Accessibility Web site
- The Department of Social and Health Services (DSHS) Accessibility Web site
- Section 508 of Rehabilitation Act, United States Access Board
- You can test and review your web site for accessibility using tools such as <u>"Bobby"</u>
- Valid Mark Up assists in accessibility. There are a number of <u>W3C</u> validator sites including:
- Validator for Mark Up Languages
- Validator for Cascading Style Sheets

Design for Performance

Develop web-based presentations with performance and user acceptability in mind. Design considerations should include download time, render time, and display of page elements. User environment variables such as browser type and version, connection speed, and Internet service provider should also be considered.

Use Meta Tags

Metadata in web page code is the key to helping the state's two comprehensive search engines, Find-It! Washington and Ask George, locate content on state agency web pages.

The <u>Content Indexing Standard</u> represents the fourteen-field Washington Government Information Locator Service (WAGILS) set established by the State Library Commission.

Use of the full set is encouraged. The minimum meta tagging should include the title, description, keyword, and originator fields of the WAGILS set. Text in the description tag is what will appear in the Ask George search results.

In addition, web page titles within the <title></title> html tag should be unique and descriptive to that page, incorporating combinations of words (or acronyms) that people would likely use when searching for information on that page. For example: Washington State Department of Licensing Home - DOL would capture search terms DOL Home page, Licensing, Department of Licensing, DOL, etc. A unique title is especially important for Ask George.

Indexing Resources:

- All about 'Ask George' A guide to helping the George search tool work for you
- Adding to Find-IT! Washington

Privacv

All government web sites shall incorporate an appropriate privacy policy. A web privacy notice shall be used to identify any information that is collected from visitors to the site and explain how that information will be used. Executive Order 00-03 requires that state agencies publish a privacy notice and safeguard personal information (names, addresses, etc.). The site home page and any web page where personal information is collected shall include a link to the appropriate privacy notice. A model privacy notice is available that addresses information collection, use, security, and access. The Information Services Board has finalized the state of Washington policy on privacy.

Examples:

- A privacy notice discussing cookies and applets
- A privacy notice discussing the collection of voluntary personal information

Intended Use/External Content Policy Guidelines

Each government agency should include a statement of policy regarding the purpose of its web site, the conditions under which the agency will place or allow "external content" on its web site, and the process the agency will use to monitor the external content allowed. The agency's statement of purpose should include an assertion that the web site is not intended as a public forum. Generic Intended Use Policy Guidelines on the DIS Digital government web site can serve as a template for such a policy statement. Agencies are urged to review and modify it as necessary and appropriate to reflect the agency's purpose, authority and business.

Agencies proposing to significantly modify template language may wish to review proposed changes with the Office of the Attorney General.

Intended Use Resources:

- Governor's Intended Use policy
- Access Washington External Content on Access Washington and Other DIS Internet Properties

Detailed Design

Common Look and Feel

Three web page definitions will assist in the implementation of the guidelines. Top Level Presentation (TLP) - The main home page for a state agency or organization. These pages are essentially indexes with hyperlinks to pages within a web site.

Mid Level Presentation (MLP) - Second-to-third-tier pages that may include home pages for programs within an agency and/or smaller divisions, or cover a specific topic area.

Page Level Presentation (PLP) - These pages contain substantive information, such as reports, publications, executive summaries, etc. i.e., the "meat and potatoes" pages of a web site or application.

The following guidelines achieve the common look and feel for Washington web-based services:

- Wide blue graphic background banner down left side of TLP and MLP
- Narrow blue graphic banner down left side PLP
- Agency identifying banner at the top of the TLP
- A clickable agency logo in a consistent location if used
- The clickable Access Washington logo at the top left of all HTML pages
- Black text with blue used as headings

- Navigation buttons along left edge
- Concept of two or three column page (left side navigation buttons, middle is text, logos or quick links on right) on the PLP and MLP

A sample of these guidelines can be found in the Access Washington style guide.

- Use Access Washington style guide. The style guide makes it easier to create web pages because the basic template code is already developed for you to copy, paste, and edit. The guide also includes information about HTML markup review, development tools, and general web developing suggestions. You should also reference your agency specific guidelines.
- Use Access Washington. Create a single point of entry for the general public and businesses through Access Washington using a common look and feel.
- Use a common approach for support of web services. Provide web-based self-help, e-mail feedback, and phone-based feedback for users.
- Write for the web. Writing for the web is very different from writing for print. The following links provide useful references:

Web writing resources:

- Style Guide
- Writing for the web
- Design of web sites
- Access Washington Style guide

Navigation

- Use a task driven approach to navigation
 - A navigation path should provide the user an easy way to accomplish their goal or complete their task. Multiple navigation paths (i.e. search, index, menus, etc.) can also be available; depending on how you think different users will try to access information
 - Use intuitively labeled links; like "Start a Business" or "Find a Job"
- Plan site navigation in a way that the user does not need knowledge of the organization to access services or information
- Provide a topical index and/or graphical site map of your agency's web site
- Provide easily identified links or navigation buttons back to the home page on all pages
- Use of the browser back button should be an option for navigation, not the exclusive method for navigation
- Primary topic categories and important links should be on every page, in the same location, and in the same sequence

- Locate primary links high enough on the page that they are visible without scrolling.
- For information located down two or three scrolls, use jump links and anchor tags to link to the information from the top of the page
- Use descriptive HTML titles for display of page name at the top of the browser, (i.e. Title of page - Department Name)
- Perform navigation testing with external consumers using the site

Design to Support the Predominant Types and Versions of Browsers

Web design should support multiple browsers. Currently, Microsoft Internet Explorer 4.01, Microsoft Internet Explorer 4.51 for the Mac, and Netscape 4.06 are the recommended minimum levels for browser support.

Video Guidelines

The use of video on the web can be a very effective tool. The average user of the Internet has a connection speed of 28.8 k to 33 k (kilobits per second). Knowing who your audience is will allow you to optimize their viewing experience by using these guidelines.

- Encode video at less than maximum speed Recommended encoding speeds:
 - 28.8 k 21 kbps
 - 56 k 37 kbps
 - high speed 80 kbps
- Give the user a choice by offering multiple versions, label each version with the appropriate speed
- Be sure to include the information about how to download the player
- Video and audio clips should be accompanied by closed captions or text transcriptions

Downloadable video files (MPEG, AVI, QuickTime) can be previewed while they are downloading, but they don't truly stream. Users have to wait for the file to download before viewing it, which allows higher quality video. Downloadable video files may be served without special server software.

Streaming video plays almost immediately, so after a few moments of buffering, viewers can begin watching the clip. Streaming video is generally a lower quality than downloadable clips. All the major streaming video options (RealVideo, VioActive, NetShow, etc.) require special software for service and viewing.

Video Resources:

- Real
- Windows Media
- QuickTime
- Shockwave player

Web Image Design Considerations

Image optimization is comprised of four components:

• Size of the image

Physical dimensions of an image

- Image Resolution
 - If you are producing an image for on-line display, the image resolution needs to match the typical monitor resolution, typically 72, but occasionally 96 ppi (pixels per inch)
 - Image files fall into 3 general quality categories:
 - High resolution for photo quality print output 800 kb (8-10 min.)
 - Medium resolution for desktop printing and full screen viewing 176 kb (1-2 min.)
 - Low resolution for e-mail and web site use 46 kb (10-20 sec.)
- Computer monitor display setting
 - Design for monitor display of 800x600 pixels
 - Images that are intended for on screen viewing, such as e-mail and web sites, should be no more than 800x600 pixels in size. A generally accepted standard for e-mail image size is about 400 pixels wide.
- Monitor Resolution
 - Monitor resolution determines the display size of an image
 - A monitor's "resolution" is fixed at either 72 ppi for a PC, or 96 ppi for a Mac, and cannot be changed by the user as the monitor's display size can.

Image Information Resources:

Information Architecture White Paper

IA-6801: Electronic Image Formats and Compression Algorithms

IEEE / A Word on Graphic Image Resolution

General information and $\underline{\text{tips for image compression}}$ and Web page optimization:

Computer Images

Development

Develop Web-based Presentations to Use HTML 4.01

This specific guideline reflects the state standard adopted by the Information Services Board (ISB) on 12/10/1999 for hypertext presentation. HTML <u>validation services</u> are available. These services allow content providers to validate their web pages against the HTML 4.01 recommendation, ensuring the maximum possible audience for their web pages.

Use Informative Hyperlinks

Link text should inform the user of the intended destination. Hyperlinks should be built with the title attribute providing information to the user regarding the destination of the link in addition to the status bar information. Avoid terms like "click here." Titles should be meaningful and short.

Test User Environment

Tests should meet agency specific audience environments including:

- Multiple operating systems and version
- Multiple network connections including dial-up
- Multiple browsers, versions (both higher and lower), and Internet service providers

Maintenance

Web Site Maintenance

Site maintenance is important because web sites need to contain the most current information available. Sites need to be monitored for usage, so that little-used pages can be modified or deleted. In addition, maintenance includes a consistent check of broken or outdated links, because they are a source of frustration for users. Several link checker programs are available to spider through a site and report on any broken links.

Since many agency web pages link to one another, it is imperative that agencies communicate whenever a page has been deleted or renamed. To find sites that link to your web page, try Alta Vista's "Who Links To Whom" feature.

Disclaimer

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